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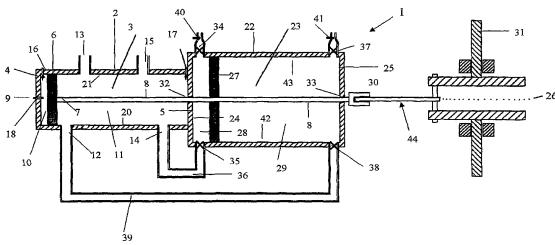
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(54) Title: DOUBLE ACTION PISTON ASSEMBLY



(57) Abstract: The present invention relates to a double action piston assembly for an internal combustion engine. The assembly comprises a combustion chamber (11) in axial alignment with a compression chamber (29) and in perpendicular alignment with a crankshaft (31). A connecting rod (44) has a first end connected to the crankshaft and a second end connected to a central power rod (8) itself connecting the compression piston (27) and the combustion piston (6). The central power rod traverse the compression and combustion chambers in their longitudinal axis. The combustion and compression chambers further include upper and lower inlet and outlet ports (12, 14, 34, 37, 13, 15, 35 and 38). The upper outlet port of the compression chamber is connected to the lower intake port of the combustion chamber and vice-verca. The upper and lower inlet ports of the compression chamber comprise means to introduce water vapour (40, 41) into the compression chamber.